

30. The optical disc of claim 29, wherein the spare area size is defined as a spare area rate which compares an absolute size of the spare area to an absolute size of a corresponding zone of the main area such that the spare area rate is varied in a radial direction of the optical disc.

31. The method of claim 7, wherein variably setting the size of each of the spare areas involves varying a size of the spare area in a radial direction of the optical disc.

32. The method of claim 31, wherein the size of the spare areas is defined as a spare area rate which compares an absolute size of the spare area to an absolute size of a corresponding zone of the main area such that variably setting the size of each of the spare areas involves varying the spare area rate in the radial direction of the optical disc.

R E M A R K S

Reconsideration and allowance in view of the foregoing amendments and following remarks are respectfully requested.

Claims 1-32 are now pending in this application; new claims 25-32 are added by this amendment.

Applicant's counsel thanks Examiner Neyzari for the assistance extended during the telephone interview conducted March 4, 1999, the substance of which is incorporated in the Amendment.

Informalities

An objection was made to the application papers under 37 C.F.R. §1.52(a). A new copy of the specification is provided herewith to obviate this objection.

A Drawing Change Authorization Request is submitted herewith requesting changes to Figures 1 and 2 and the addition of a new Figure 3.

Rejections Under Section 102

Claims 1-4 and 7-24 were rejected under 35 U.S.C. § 102(b) as being anticipated by Ito et al (U.S. Patent No. 5,715,221). Applicant respectfully traverses this rejection.

Claim 1 requires an optical disc having (1) a main area with plural zones for storing digital data and (2) a spare area having areas within each of the zones of the main area, the relative size of at least two spare areas being varied. Claims 7, 11 and 16 recite similar features.

As indicated above, new Figure 3 has been added to more clearly illustrate a variation in relative size of at least one spare area within the optical disc, which feature is required by claims 1, 7, 11 and 16. Specifically, Figure 3 shows a variation in the size of the spare area in the radial direction of the optical disc, where the spare area size is defined by a spare area rate which compares an

absolute size of the spare area to an absolute size of a corresponding zone in the main area. A more detailed discussion of this feature can be found in the preferred embodiments section of the disclosure, e.g., page 5, lines 27-32; Tables 2 and 3 and page 9, line 21-page 10, line 2.

Section 102 requires that the prior art provide explicit teaching of each feature recited in the claims. As discussed during the telephone interview, the cited Ito reference fails to teach (or suggest) varying the relative size of different spare areas on an optical disc, as required by claims 1, 7, 11 and 16. Rather, the Ito reference appears to teach spare areas of constant size and proportionality relative to the data sectors. See, e.g., Figs. 18A and 21A.

Because Ito fails to teach plural spare areas whose relative sizes vary, Ito fails to anticipate the features of claims 1, 7, 11 and 16. Thus, Applicant requests withdrawal of the Section 102 rejection of claims 1, 7, 11 and 16, and claims 2-4, 8-10, 12-15 and 17-24 depending therefrom.

Allowable Subject Matter

Claims 5-6 were deemed to contain allowable subject matter. However, an objection was made to claims 5-6 for being dependent upon rejected base claim 1. This objection is traversed in view of the arguments present above regarding patentability of claim 1 over the cited prior art reference.

New Claims 25-32

New claims 25-32 recite features which are not implied or suggested by the references of record, including Ito.

For instance, new claim 25 recites an optical disc with spare areas having sizes that vary in a radial direction of the optical disc. New claim 31 recites similar features. As mentioned previously, the Ito reference fails to teach variations in the size of spare areas.

New claims 26, 30, and 32 recite variations in a spare area rate of plural spare areas, which spare area rate is defined based on a comparison between an absolute size of the spare area to an absolute size of a corresponding zone of the main area. For instance, Tables 2 and 3 show a variation in the spare area rate relative to the radial direction of the optical disc.

New claim 29 recites an optical disc in which the size of spare areas varies based on a capacity of a corresponding portion of the optical disc. An example of this feature is described in the body of the specification at page 5, lines 9-13 and 27-31.

The prior art of record fails to teach or suggest each of the above, and other, recited features. Thus, newly added claims 25-32 are believed to be in condition for allowance.

Conclusion

All objections and rejections being overcome, it is respectfully submitted that the present application is in


condition for allowance and a Notice to that effect is earnestly solicited.

In the event that any outstanding matters remain in this application, Applicant requests that the Examiner contact Karl Renner (Reg. No. 41,265) at (703) 205-8034 to discuss such matters. If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or 37 C.F.R. § 1.17, particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By



Terry L. Clark
Reg. No. 32,644

P.O. Box 747
Falls Church, VA 22040-0747
(703) 205-8000

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Enclosures
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